UNITED STATES PATENT AND TRADEMARK OFFICE

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>23 December 2008</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-11</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-11</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   The applicant has amended claims 1-8 and added claims 9-11 in the amendment

received on 12/23/2008.

Claims 1-11 are pending.

Response to Arguments

2.   Applicant's arguments with respect to claims 1-11 have been considered but are

moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Booth

(U.S. Patent 6,065,073).

With regards to claim 5, Booth teaches an electronic apparatus comprising a

connector jack for connection of a network Cable (PHY Device 440, figure 5); an access

controller for detecting an electrical connection or disconnection between the network

cable and said connector jack by detecting an availability of a digital signal received

from a network (i.e., a network interface card (NIC) controls the access between the

computer system and the physical layer, or electrical connection, figure 5 and column

12, lines 18-31, and is monitoring an inactive link for activity and generating a CPU

interrupt for when the link is active, figure 9 and column 17, lines 1-14, or monitoring for

the loss of a network link, figure 9 and column 16, lines 23-31, where upon completion

of the auto-negotiation process with the network, the link is detected as active, and the

available link provided may be a 1000Base-X Ethernet link or other speed detected and

negotiated above the datalink layer such as IP, teaching digital signal availability,

column 12, lines 48-67 and column 17, lines 1-14); and a micro-computer wherein a

detection output of said access controller is supplied as an interrupt signal to said micro-

computer in response to detecting the availability of the digital signal (i.e., if the link is

available an interrupt is provided to the CPU, where the link may be provided by a

1000Base-X Ethernet link or other speed detected and negotiated above the datalink

layer such as IP, teaching a digital signal, column 12, lines 48-67 and column 17, lines

1-14), and upon detection of the interrupt signal, said micro-computer executes

processing for connection or disconnection of said network cable (i.e., the CPU reads,

teaching performing processing, a register to determine the cause of the interrupt for

processing of the connection, column 21, line 3-15).

    With regards to claim 6, Booth teaches when an access controller has detected

the connection of said network cable, said micro-computer detects a link to said

network, and when said micro-computer detects said link to said network, said micro-

computer executes the processing for accessing the network (i.e., the CPU detects the

link to the network via an interrupt from the network card and must service the interrupt,

thus providing processing for accessing the network such as reading registers, Abstract,

figure 9 and column 16, paragraph, lines 9-67 and column 17, lines 1-14 and column

21, line 3-15).

With regards to claim 7, Booth teaches when an access controller has detected

the disconnection of said network cable, the micro-computer executes the processing of

not allowing the use of said network (i.e., the CPU detects the link to the network via an

interrupt from the network card and must service the fault interrupt, thus providing

processing for not allowing the use of the network such as reading the registers,

Abstract, and figure 9, column 16 paragraph, lines 9-67, column 17, lines 1-14, and

column 21, lines 3-15).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1-4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Booth (U.S. Patent 6,065,073) in view of Haller et al. (U.S. Patent 7,149,773 B2).

With regards to claim 1, Booth teaches a method for supervising a connection to

a network of an electronic apparatus including an access controller for detecting an

electrical connection or disconnection of a network cable, and a micro-computer (i.e., a

network interface card (NIC) controls the access between the computer system and the

physical layer, or electrical connection, figure 5 and column 12, lines 18-31, and is

monitoring an inactive link for activity and generating a CPU interrupt for when the link is

active, figure 9 and column 17, lines 1-14, or monitoring for the loss of a network link,

figure 9 and column 16, lines 23-31), the method comprising detecting an availability of

a digital signal received from the network (i.e., upon completion of the auto-negotiation

process with the network, the link is detected as active, and the available link provided

may be a 1000Base-X Ethernet link or other speed detected and negotiated above the

datalink layer such as IP, teaching digital signal availability, column 12, lines 48-67 and

column 17, lines 1-14); supplying, in response to detecting the availability of the digital

signal, a detection output of said access controller as an interrupt signal to said micro-

computer (i.e., if the link is available an interrupt is provided to the CPU, where the link

may be provided by a 1000Base-X Ethernet link or other speed detected and negotiated

above the datalink layer such as IP, teaching a digital signal, column 12, lines 48-67

and column 17, lines 1-14); by the micro-computer, processing for connection or

disconnection of said network cable in response to receiving the interrupt signal (i.e.,

the CPU reads, teaching performing processing, a register to determine the cause of

the interrupt for processing of the connection, column 21, line 3-15). Booth does not

explicitly disclose a micro-computer comprising a non-event-driven type operating

system. However, Haller teaches an OS in said micro-computer is a non-event-driven

OS [i.e., LINUX] (column 23, lines 53-58), in order to facilitate communication with a

remote computer system via a communication module (column 1, lines 50-60 and

column 23, lines 53-38). Therefore, based on Booth in view of Haller, it would have

been obvious to one of ordinary skill in the art at the time the invention was made to

utilize the teachings of Haller to the system of Booth in order to facilitate communication
with a remote computer system via a communication module.

With regards to claim 2, Booth teaches the method for supervising the
connection of a network according to claim 1, wherein when an access controller
detects the connection of said network cable, said micro-computer detects a link to said
network, and when said micro-computer detects said the link to said network, said
micro-computer executes processing for accessing the network (i.e., the CPU detects
the link to the network via an interrupt from the network card and must service the
interrupt, thus providing processing for accessing the network such as reading registers,
Abstract, figure 9 and column 16, paragraph, lines 9-67 and column 17, lines 1-14 and
column 21, line 3-15).

With regards to claim 3, Booth teaches the method for supervising the
connection of a network according to claim 1, wherein when said access controller has
detected the disconnection of said network cable, said micro-computer executes
processing for not allowing use of said network (i.e., the CPU detects the link to the
network via an interrupt from the network card and must service the fault interrupt, thus
providing processing for not allowing the use of the network such as reading the
registers, Abstract, and figure 9, column 16 paragraph, lines 9-67, column 17, lines 1-
14, and column 21, lines 3-15).

With respect to claim 4, Booth teaches the method for supervising the connection
of a network according to claim 1, wherein when said network cable is connected, use
of said network is enabled through said network cable (i.e., the link to the network may

be utilized if other links are not reliable or down, thus enabling access to the network,
Abstract, and figure 9, column 10, lines 54-59, column 16, lines 9-67 and column 17,
lines 1-14).

With regards to claim 8, Booth teaches an electronics apparatus wherein when
the network cable is connected to the connector jack, the use of the network is enabled
through said network cable (i.e., the link to the network may be utilized if other links are
not reliable or down, thus enabling access to the network, Abstract, and figure 9,
column 10, lines 54-59, column 16, lines 9-67 and column 17, lines 1-14). Booth does
not specifically teach an operating system in said micro-computer is a non-event-driven
type OS. However, Haller teaches an operating system in said micro-computer is a
non-event-driven OS [i.e., LINUX] (Haller, column 23, lines 53-58), in order to facilitate
communication with a remote computer system via a communication module (Haller,
column 1, lines 50-60 and column 23, lines 53-38). Therefore, based on Booth in view
of Haller, it would have been obvious to one of ordinary skill in the art at the time the
invention was made to utilize the teachings of Haller to the system of Booth in order to
facilitate communication with a remote computer system via a communication module.

7.   Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Booth
(U.S. Patent 6,065,073) in view of Haller et al. (U.S. Patent 7,149,773 B2), and further
in view of Shields (US Patent 5,784,643).

With respect to claim 9, Booth and Haller teach the subject matter disclosed
above. Booth and Haller do not explicitly disclose processing for accessing the network

comprises executing at least one hook program selected based on preset information
stored in the micro-computer. However, Shields teaches processing for accessing the
network comprises executing at least one hook program selected based on preset
information stored in the micro-computer (i.e., a hook program is utilized to gain access
to the network, where the hook program is selected and customized to be between the
operating system and the application to be utilized for modem connection for translation
of application commands and the hook program is stored in the processor unit memory,
column 3, lines 49-55, column 4, lines 3-19, and figure 3(c)), in order to allow efficient
transmission of information for application developers by allowing generic applications
to support multiple types of communication (Shields, column 2, lines 59-67 and column
3, lines 9-20) Therefore, based on Booth in view of Haller and further in view of Shields,
it would have been obvious to one of ordinary skill in the art at the time the invention
was made to utilize the teachings of Shields to the system of Booth and Haller in order
to allow efficient transmission of information for application developers by allowing
generic applications to support multiple types of communication.

8.   Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Booth
(U.S. Patent 6,065,073) in view of Haller et al. (U.S. Patent 7,149,773 B2) and Shields
(US Patent 5,784,643), and further in view of Dill (US 2003/0097431 A1).

        With respect to claim 10, Booth and Haller teach the subject matter disclosed
above. Booth and Haller do not explicitly disclose a hook program. However, Shields
teaches a hook program (i.e., a hook program is inserted between the application and

the operating system, column 4, lines 3-19). Hence, the limitations taught by Booth in view of Haller, and further in view of Shields for claim 10 are rejected in the analysis of claim 9 above, and claim 10 is rejected on that basis.

Further, Booth, Haller, and Shields do not explicitly disclose at least one program directs a DHCP client to acquire an Internet Protocol address for the electronic apparatus. However, Dill teaches at least one program directs a DHCP client to acquire an Internet Protocol address for the electronic apparatus (i.e., the programs direct the networking interface via a DHCP client, which interacts with a DHCP server, teaching assigning, and therefore obtaining, an IP address, paragraphs 0018 and 0070) and an OS in said micro-computer is a non-event-driven OS [i.e., LINUX] (i.e., the programming is intended to utilize a Linux kernel for the device, paragraph 0012), in order to provide a single device for interconnection and network maintenance by providing the appropriate programming adapted for a connection (Dill, paragraphs 0010-0012). Therefore, based on Booth in view of Haller and Shields, and further in view of Dill, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Dill to the system of Booth and Haller and Shields in order to provide a single device for interconnection and network maintenance by providing the appropriate programming adapted for a connection.

9.   Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Booth (U.S. Patent 6,065,073) in view of Haller et al. (U.S. Patent 7,149,773 B2), and further in view of Dill (US 2003/0097431 A1).

With respect to claim 11, Booth and Haller teach the subject matter disclose above. Booth and Haller do not explicitly disclose processing for accessing the network comprises requesting an Internet Protocol address for the electronic apparatus. However, Dill teaches processing for accessing the network comprises requesting an Internet Protocol address for the electronic apparatus (i.e., the programs directs the networking interface via a DHCP client, which interacts with a DHCP server, teaching assigning, and therefore obtaining, an IP address, paragraphs 0018 and 0070) and an OS in said micro-computer is a non-event-driven OS [i.e., LINUX] (i.e., the programming is intended to utilize a Linux kernel for the device, paragraph 0012), in order to provide a single device for interconnection and network maintenance by providing the appropriate programming adapted for a connection (Dill, paragraphs 0010-0012). Therefore, based on Booth in view of Haller and further in view of Dill, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Dill to the system of Booth and Haller in order to provide a single device for interconnection and network maintenance by providing the appropriate programming adapted for a connection.

Conclusion

10.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

11.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to THOMAS LEE whose telephone number is (571) 270-

7292. The examiner can normally be reached on Monday to Friday, 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, James Hwang can be reached on (571) 272-4036. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas Lee/
Art Unit 2447
11 February 2009

/Joon H. Hwang/
Supervisory Patent Examiner, Art Unit 2447